DEPARTMENT OF THE NAVY
SOUTHWEST DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
1220 PACIFIC HIGHWAY
SAN DIEGO, CA 92132 - 5190

5090
Ser 5CEN.PU/137
May 10, 2004

Ms. Beatrice Griffey
California Environmental Protection Agency
California Regional Water Quality Control Board
Mitigation & Cleanup Unit
9174 Sky Park Court, Suite 100
San Diego, CA 92123-4340

Mr. Tayseer Mahmoud
California Environmental Protection Agency
Department of Toxic Substance Control
Office of Military Facilities
5796 Corporate Avenue
Cypress, CA 90603

Mr. Martin Hausladen
U. S. Environmental Protection Agency
Region IX, Code SFD-8-B
75 Hawthorne Street
San Francisco, CA 94105-3901

2004 SEP 28 A 9:12
SAN DIEGO REGION
WATER QUALITY
CONTROL BOARD

Dear Ms. Griffey, Mr. Mahmoud, and Mr. Hausladen:

Enclosed is the Explanation of Significant Difference for Operable Unit 1 Record of Decision, Installation Restoration Site 9, Stuart Mesa Waste Stabilization Pond, Marine Corps Base Camp Pendleton. The Department of the Navy is requesting signature of this document according to the attached schedule matrix. Once signed, please forward the original wet ink document to the next agency using the supplied postage-paid envelopes.

Should you have any questions, please call the Department of the Navy Remedial Project Manager, Dr. Patricia Underwood, at (619) 532-4813.

Sincerely,

Kathie J. Beverly

KATHIE J. BEVERLY
Environmental Business Line
Team Leader
By direction of the Commander

Document Signature Schedule Matrix

Action	Date
MCB CG Signature	4/19/04
SWDIV Transmit to EPA	5/10/04
EPA in Receipt of ESD	5/11/04
EPA Signature	5/24/04
EPA Transmit to DTSC	5/25/04
DTSC in Receipt of ESD	5/26/04
DTSC Signature	6/09/04
DTSC Transmit to RWQCB	6/10/04
RWQCB in Receipt of ESD	6/11/04
RWQCB Signature	6/28/04
RWQCB Transmit to SWDIV	6/29/04
SWDIV Issue Final ESD - Send to TRC - Place in Administrative Record and Information Repositories	7/07/04
SWDIV Publish Public Notice	7/07/04

ENCLOSURE (2)

5090
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Enclosures: 1. Explanation of Significant Difference for Operable Unit 1 Record of Decision, Installation Restoration Site 9, Stuart Mesa Waste Stabilization Pond, Marine Corps Base Camp Pendleton.
2. Document Signature Schedule Matrix.

Copy to:
Commanding General
Assistant Chief of Staff, Environmental Security
Attn: Mr. Mark Bonsavage
Box 555008
U. S. Marine Corps Base
Camp Pendleton, CA 92055-5008

EXPLANATION OF SIGNIFICANT DIFFERENCE FOR OPERABLE UNIT 1 RECORD OF DECISION INSTALLATION RESTORATION SITE 9 STUART MESA WASTE STABILIZATION POND MARINE CORPS BASE CAMP PENDLETON FEBRUARY 2004

I. INTRODUCTION

Site Name and Location:
Installation Restoration (IR) Site 9, Stuart Mesa Waste Stabilization Pond in the 41 Area
Marine Corps Base (MCB) Camp Pendleton
San Diego County, California

Lead and Support Agencies:
U.S. Department of Navy (DoN) – Lead Federal Agency
U.S. Environmental Protection Agency (EPA) – Lead Regulatory Agency
California EPA Department of Toxic Substances Control (DTSC) – Lead State Agency
California EPA Regional Water Quality Control Board (RWQCB) – State Support Agency.

Camp Pendleton's IR program is governed by a Federal Facilities Agreement (FFA). The aforementioned lead and support agencies comprise the MCB Camp Pendleton FFA Team, which maintains responsibility for the assessment and remediation of IR sites at the base.

Background
The Record of Decision (ROD) for Operable Unit 1, including IR Site 9, was signed December 12, 1995. This Explanation of Significant Difference (ESD) is required by Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) §117 (c), 42 U.S.C. §9617 (c) and National Oil and Hazardous Substances Contingency Plan (NCP) 40 C.F.R. §300.435 (c)(2)(i), because significant changes to the remedy specified in the ROD are now planned.

The purpose of this ESD is to:

- Acknowledge the early attainment of remedial action objectives (RAOs) in groundwater at IR Site 9.
- Document the conclusion of long-term groundwater monitoring, and the initiation of site closeout.
- Document the identification of a suspected off-site volatile organic compound (VOC) source resulting in increasing VOC concentrations in monitoring well 9W-07A. The suspected source will be addressed as new IR Site 1114.

An ESD is required when significant, but not fundamental, changes are made to the final remedial action plan described in the ROD. This ESD is necessary because the ROD for IR Site 9 called for 10 years of groundwater monitoring, an additional Five-Year review, and compliance demonstration monitoring during the eighth year of monitoring. No further action for groundwater is now planned because attainment of groundwater RAOs has been demonstrated throughout seven years of groundwater monitoring. Groundwater remedial action objectives

for IR Site 9 were based on Maximum Contaminant Levels (MCLs) for drinking water established by U.S. EPA. The MCL for both tetrachloroethylene (PCE) and trichloroethylene (TCE) is 5 micrograms per liter.

This ESD will become part of the Administrative Record (AR) for IR Site 9, in accordance with NCP 40 C.F.R. §300.825(a)(2). The AR contains all information, data and documents used to support the selection of the remedy for IR Site 9. It is the stand-alone legal source of information on the site. All documents supporting the remedial action decisions for IR Site 9 are located at Southwest Division Naval Facilities Engineering Command (SWDIV), and are available for review between 0830 and 1630 Monday through Friday. Advance scheduling to review documents is requested. The AR Point of Contact is as follows:

Ms. Diane Silva
Southwest Division, Naval Facilities Engineering Command
1220 Pacific Highway, San Diego, CA 92101
(619) 532-3676
diane.silva@navy.mil

Regulatory Guidance

The DoN prepared this ESD in accordance with the following regulations and guidance:

- National Contingency Plan 40 C.F.R. Part 300
- *A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Documents.* July 1999. U.S. EPA, EPA 540-R-98-031, OSWER 9200.1-23P
- *Guide to Addressing Pre-ROD and Post-ROD Changes.* April 1991. U.S. EPA, EPA Publication 9355.3-02FS-4. OERR OS-220W.

II. SITE HISTORY, CONTAMINATION, AND SELECTED REMEDY

From 1963 until approximately 1975, the Stuart Mesa Waste Stabilization Pond served as an oxidation and percolation sewage lagoon for sewage generated in the 41 Area. Operations at the waste stabilization pond ceased in 1975, and the raw sewage was pumped from Building 41300 to a treatment facility in the 43 Area.

The DoN first identified IR Site 9 during the Site Inspection (SI) performed in 1987 and 1988. During the SI, the DoN discovered that waste oils or other liquids might have been disposed at the site. Following site identification, the DoN classified IR Site 9 among the Group A Sites, those IR sites considered to have the greatest potential to impact human health and/or the environment.

The DoN conducted a Remedial Investigation (RI) of the Group A Sites between February 1992 and April 1993. The RI indicated remedial action was required due to the nature of the contaminants discovered at the site. The Feasibility Study (FS) for Site 9, completed in 1994, addressed potential remedial actions for petroleum hydrocarbons and beryllium in soil and TCE and PCE in groundwater.

The ROD documented alternatives and the selection of remedial actions for IR Site 9 soil and groundwater. The remedies selected included no action for hydrocarbons and beryllium in soil and monitored natural attenuation, long-term monitoring, and land use controls for PCE and TCE in groundwater.

Specifically, the ROD included the following major components:

- Sampling and analysis of IR Site 9 monitoring wells semiannually for ten years to verify that dispersion and natural attenuation are occurring.
- Evaluation of the remedial alternative's effectiveness once every five years.
- Compliance demonstration monitoring consisting of eight sampling events, evenly spaced throughout a one-year period, conducted during the eighth year of groundwater monitoring (2004) to assess the effectiveness of the dispersion and natural attenuation of PCE and TCE in groundwater.
- Amendment of the Base Master Plan to restrict future access to the groundwater in the immediate vicinity of IR Site 9 for the duration of the long-term monitoring or until the contaminants in groundwater no longer exceed MCLs.

III. BASIS FOR THIS ESD

The DoN initiated long-term semiannual groundwater monitoring in 1997. Since that time, groundwater quality has met the ROD RAOs in all monitored wells except 9W-07A. The DoN conducted a Five-Year Review between December 2000 and January 2001 to assess whether the selected remedial action adequately protected human health and the environment. The Five-Year Review determined that the remedy at IR Site 9 protected human health and the environment under then-current site conditions. However, PCE was present in monitoring well 9W-07A in concentrations exceeding Federal and State of California MCLs.

The Five-Year Review concluded that PCE in monitoring well 9W-07A was not degrading as predicted in the fate and transport model and that PCE concentrations had increased over the Five-Year Review period. The source of PCE was not identified, and additional soil and groundwater data were recommended to confirm the waste stabilization pond was not the source. Specifically, the Five-Year Review recommended the installation of one soil boring to be converted to a monitoring well located in the southeast portion of the waste stabilization pond.

The July 2003 *Technical Memorandum Summary of Soil and Monitoring Well Sampling* (Tech Memo) documents the additional characterization conducted to assess the southeastern portion of the waste stabilization pond as a potential VOC source to groundwater. Neither PCE nor TCE were reported in soil or groundwater samples collected. The waste stabilization pond does not appear to be the source of solvents that have historically been detected in monitoring well 9W-07A.

The Tech Memo recommended the following:

- Discontinuing sampling of IR Site 9 groundwater. The 1995 ROD called for semiannual groundwater sampling and analysis for ten years to verify that dispersion and natural attenuation are occurring. The Five-Year Review verified attainment of RAOs, with the exception of groundwater conditions in monitoring well 9W-07A. Although three years of planned monitoring remain, this would not be an efficient use of resources and the resulting data would add little value.
- Preparation of a Sampling and Analysis Plan to characterize the source, nature, and extent of VOCs in groundwater including, and upgradient of, monitoring well 9W-07A. This new site has been designated IR Site 1114 and will be defined based on the extent of VOCs in groundwater. The assignment of new IR Site 1114 will be formalized, and resources for its management will be planned.
- Proceeding with Site Closeout for IR Site 9 and documenting the attainment of RAOs.

The FFA team concurred with these recommendations presented by the DoN during the 72nd FFA meeting on April 17, 2003. Documents in the AR which support the need for these changes to the ROD include:

- *Groundwater Monitoring Reports* issued since 1997 by Navy Public Works Center for SWDIV.
- *Five-Year Review* (SWDIV 2002).
- *Site 9 Tech Memo* (Navy Public Works Center 2003).

IV. DESCRIPTION OF SIGNIFICANT DIFFERENCES

A summary of the significant differences between the remedy presented in the ROD and the action now proposed is provided below:

Original Remedy	Modified Remedy
▪ Groundwater sampled and analyzed semiannually for 10 years to verify that dispersion and natural attenuation are occurring.	▪ No further action for groundwater is now planned because attainment of groundwater RAOs has been demonstrated throughout seven years of groundwater monitoring.
▪ Five-Year Reviews to assess the effectiveness and document the progress of monitored natural attenuation.	▪ No additional Five-Year Reviews will be conducted.
▪ Compliance demonstration monitoring consisting of eight groundwater sampling events evenly spaced throughout a 1-year period to be conducted during the eighth year of groundwater monitoring (2004).	▪ Compliance demonstration monitoring will not be conducted.
▪ Institutional controls if future site land use changes to include residential	▪ Institutional controls will not be implemented because they are not

purposes.	necessary to ensure protection of human health and the environment.

Groundwater quality in all wells monitored since 1997 meets RAOs except in monitoring well 9W-07A. Additional groundwater monitoring, compliance monitoring demonstration, and additional Five-Year Reviews will not be conducted. Site closeout will now be initiated for IR Site 9.

Monitoring well 9W-07A remains the single groundwater monitoring location where groundwater RAOs are not met. However, the former waste stabilization pond does not appear to be the source of VOCs reported in this well. The suspected off-site source of VOCs in monitoring well 9W-07A will be addressed as new IR Site 1114, designated the 41 Area Arroyo Site.

The IR Site 9 remedial schedule will be reduced by three years from the currently planned ten-year duration for long-term groundwater monitoring of natural attenuation to a seven-year duration. The selected remedy and cleanup standards remain unchanged.

The schedule reduction incurs parallel cost reduction by eliminating three years of groundwater monitoring, the 2004 compliance monitoring demonstration, and an additional Five-Year Review. Site closure will be advanced by three years, and remedial costs will be reduced by an estimated $410,000.

V. SUPPORT AGENCY COMMENTS

A summary of support agency comments on the ESD will be included as comments become available.

VI. STATUTORY DETERMINATIONS

Considering the new information that has been developed and the changes that have been made to the selected remedy, the proposed differences to the ROD are protective of human health and the environment with an additional benefit of schedule and cost reduction. The ESD utilizes permanent solutions to the maximum extent practicable for the site and is time- and cost-effective. The modified remedy satisfies CERCLA §121 and complies with the NCP and other Federal and State requirements identified in the ROD as applicable or relevant and appropriate to this remedial action at the time the ROD was signed.

VII. PUBLIC PARTICIPATION COMPLIANCE

In accordance with the public participation requirements set forth in NCP §300.435(c)(2)(i), the DoN will publish a Notice of Availability and a brief description of this ESD in local newspapers. The ESD is available to the public in the AR and the Information Repositories located at the Oceanside Public Library and the Patrick Carney Base Library. The ESD will also be mailed to individuals on the Technical Review Committee mailing list.

FOR THE UNITED STATES MARINE CORPS, MARINE CORPS BASE CAMP PENDLETON:

4/19/04
Date

W. G. Bowdon
Major General, U.S. Marine Corps
Commanding

FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY:

9/22/04
Date

Kathleen H. Johnson
Chief, Federal Facilities and Site Cleanup Branch
U.S. Environmental Protection Agency, Region IX

FOR THE STATE OF CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY:

9/27/04
Date

John E. Scandura
Chief, Southern California Operations
Office of Military Facilities
Department of Toxic Substances Control

10/5/04
Date

John Robertus
Executive Officer
Regional Water Quality Control Board, San Diego Region